

IN THE SPECIFICATION

Please amend the Title on page 1 as follows: ~~IMAGE ENCODING APPARATUS, IMAGE ENCODING METHOD, IMAGE ENCODING PROGRAM, IMAGE DECODING APPARATUS, IMAGE DECODING METHOD, IMAGE DECODING PROGRAM~~
IMAGE ENCODING/DECODING APPARATUS AND ASSOCIATED METHODOLOGY OF EMPLOYING MATCHING PURSUIT COMPRESSION

Please amend the paragraph [0002] beginning at page 1, line 12 as follows:

[0002] In an image encoding apparatus for generating compression data made by encoding a coding target image, a processing of decomposing the coding target image by using a plurality of bases is executed. As a kind of such an image encoding apparatus, a video encoding apparatus for executing a processing of decomposing a prediction residual image of a coding target frame as an coding target image by using a Matching Pursuits method (hereinafter, referred to as an "MP method" in this specification) is known (for example, see Neff R. and Zakhor A., "Very Low Bit-Rate Coding Based on Matching Pursuit," IEEE Trans. Circuits Syst. Video Technol., vol. 7, no. 1, pp. 158-171, February 1997). The MP method repeats the processing, which defines the coding target image as an initial residual component and decomposes the residual component by using a basis set, by using the following formula (1). Here, in the formula (1), f denotes the coding target image, $R_n f$ does a residual component after the n -th repetitive operation, g_{kn} does a basis which maximizes an inner product value with $R_n f$, and $R_m f$ does a residual component after the m -th repetitive operation. That is, according to the MP method, the basis which maximizes an inner product value with a residual component is selected from a basis set, and the residual component is decomposed into the selected basis and a largest inner product value which is a coefficient for multiplication with this basis.